Noble U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office SEARCH REQUEST FORM

Requestor's BERCH	Serial	503 39554D	
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Date: 5/17/64 Phone: 5	711-214-0663	Art Unit: 1624 box 5018	
Search Topic: Please write a detailed statement of search topic. Describe specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples or relevent citations, authors, keywords, etc., if known. For sequences, please attach a copy of the sequence. You may include a copy of the broadest and/or most relevent claim(s).			
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y= Halor -0- c Cot.	$\frac{1}{R_{2}}$ $C-0$	- (Hu = (-10))	
$R_{Y}, 0 = O(H c)$ $R_{Z} = -\zeta^{A} \circ (H c)$ $R_{Z} = -\zeta^{A} \circ (H c)$ $R_{Y} - R_{Z} \circ (H c)$	c) ne together	= CH2	
Claim 8043- # 4 of 6			
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STAFF USE ONLY			
Date completed: 5/26/64	Search Site	Vendors	
Searcher: Nuble	STIC	1G	
Terminal time: 15 WIN Elapsed time:	CM-1 Pre-S	X3 / STN	
CPU time: 20 MIN	Type of Search	Dialog APS	
Total time:	N.A. Sequence	Geninfo	
Number of Searches:	A.A. Sequence	SDC	
Number of Databases:	2 Structure s	DARC/Questel	

Bibliographic

_ Other



STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact the searcher or contact:

Mary Hale, Information Branch Supervisor Remsen Bldg. 01 D86 571-272-2507

Voluntary Results Feedback Form

and a first production of the state of the s
> I am an examiner in Workgroup: Example: 1610
> Relevant prior art found, search results used as follows:
102 rejection
☐ 103 rejection
☐ Cited as being of interest.
Helped examiner better understand the invention.
Helped examiner better understand the state of the art in their technology.
Types of relevant prior art found:
☐ Foreign Patent(s)
 Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.)
> Relevant prior art not found:
Results verified the lack of relevant prior art (helped determine patentability).
Results were not useful in determining patentability or understanding the invention.
Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library. Remsen Bldg : And



=> d his

FILE 'REGISTRY' ENTERED AT 11:58:25 ON 26 MAY 2004 L1STR L2SCR 2026 L31 L1 AND L2 39 L1 AND L2 FULL L4SAVE TEMP BER554FUL/A L4 L5 STR L1 L6 STR L5 0 L6 SAM SUB=L4 1.7 2 L6 FULL SUB=L4 L8 FILE 'HCAPLUS' ENTERED AT 12:39:04 ON 26 MAY 2004 Ь9 0 S L8 FILE 'USPATFULL, USPAT2' ENTERED AT 12:39:19 ON 26 MAY 2004 0 S L8 L10 FILE 'HCAOLD' ENTERED AT 12:39:41 ON 26 MAY 2004 0 S L8 L11 FILE 'BEILSTEIN' ENTERED AT 12:40:11 ON 26 MAY 2004 0 S L8 FULL L12FILE 'REGISTRY' ENTERED AT 13:09:51 ON 26 MAY 2004 L13 37 S L4 NOT L8

=> b reg

FILE 'REGISTRY' ENTERED AT 12:51:08 ON 26 MAY 2004 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2004 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6 DICTIONARY FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d que stat 18 L1 STR

VAR G1=O/X NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED ECOUNT IS E5 C AT 12

GRAPH ATTRIBUTES:

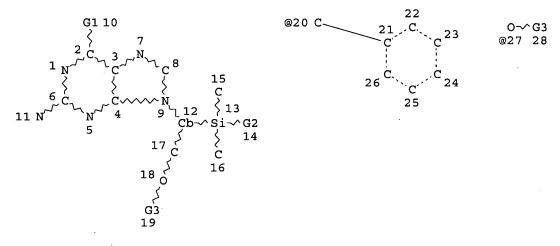
RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE

L2 SCR 2026

L4 39 SEA FILE=REGISTRY SSS FUL L1 AND L2

L6 ST



C@29 O@30

VAR G1=X/27
VAR G2=29/30
VAR G3=20/H
NODE ATTRIBUTES:
NSPEC IS RC AT 29
NSPEC IS RC AT 30
DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E5 C AT 12

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 30

STEREO ATTRIBUTES: NONE

L8 2 SEA FILE=REGISTRY SUB=L4 SSS FUL L6

100.0% PROCESSED 39 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

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L8 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2004 ACS on STN

RN 649761-24-0 REGISTRY

CN 6H-Purin-6-one, 2-amino-9-[(1S,3R,4S)-4-(dimethylphenylsilyl)-2-methylene-3-[(phenylmethoxy)methyl]cyclopentyl]-1,9-dihydro- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C27 H31 N5 O2 Si

SR CAS Client Services

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L8 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2004 ACS on STN
- RN 649761-23-9 REGISTRY
- CN Cyclopentanemethanol, 5-[2-amino-6-(phenylmethoxy)-9H-purin-9-yl]-3-(dimethylphenylsilyl)-1-hydroxy-2-[(phenylmethoxy)methyl]-, (1S,2S,3S,5S)-(9CI) (CA INDEX NAME)
- FS STEREOSEARCH
- MF C34 H39 N5 O4 Si
- SR CAS Client Services

=> d sca

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 9-[4-[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propoxy]2-cyclopenten-1-yl]-6-methoxy-N-[(4-methoxyphenyl)diphenylmethyl]-, cis(9CI)

MF C40 H49 N5 O4 Si

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):36

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN 9H-Purin-2-amine, 9-[3,4-bis[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-2-fluorocyclopentyl]-6-chloro-, [1S-(1 α ,2 β ,3 α ,4 β)]- (9CI)

MF C44 H51 Cl F N5 O2 Si2

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Methanimidamide, N'-[9-[(1S,3S,4S)-4-[[(1,1-dimethylethyl)dimethylsilyl]ox
 y]-3-formyl-2-methylenecyclopentyl]-6,9-dihydro-6-oxo-1H-purin-2-yl]-N,N dimethyl- (9CI)

MF C21 H32 N6 O3 Si

Absolute stereochemistry. Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Cyclopentaneacetic acid, $4-[1,6-dihydro-2-[(2-methyl-1-oxopropyl)amino]-6-oxo-9H-purin-9-yl]-2-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-, methyl ester, <math>(1\alpha,2\beta,4\alpha)-(9CI)$

MF C34 H43 N5 O5 Si

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN 6H-Purin-6-one, 2-amino-9-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methy l]-2,3-dihydroxycyclopentyl]-1,9-dihydro-, [1R- $(1\alpha,2\beta,3\beta,4\alpha)$]- (9CI) MF C17 H29 N5 O4 Si

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 6-chloro-9-[5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]me thyl]-4-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]-2-cyclopenten-1-yl]-, $(1\alpha, 4\alpha, 5\beta)$ - (9CI)

MF C34 H46 Cl N5 O2 Si2

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Propanamide, N-[9-[3-[[(1,1-dimethylpropyl)dimethylsilyl]oxy]-4-[(triphenylmethoxy)methyl]cyclopentyl]-6-[2-(4-nitrophenyl)ethoxy]-9H-purin-2-yl]-2-methyl-, [1R-(1 α ,3 β ,4 α)]- (9CI)

MF C49 H58 N6 O6 Si

Absolute stereochemistry. Rotation (+).

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN 2-Cyclopentene-1-acetic acid, 4-(2-amino-6-chloro-9H-purin-9-yl)- α -nitro-, 2-(trimethylsilyl)ethyl ester, [1 α (S*),4 α]- (9CI) MF C17 H23 Cl N6 O4 Si

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 9-[2-[2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]cyc
lopentyl]-6-methoxy-, trans- (9CI)

MF C19 H33 N5 O2 Si

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Methanimidamide, N'-[9-[(1S,3R,4S)-4-[[(1,1-dimethylethyl)dimethylsilyl]ox
 y]-3-(hydroxymethyl-t)-2-methylenecyclopentyl]-6,9-dihydro-6-oxo-1H-purin 2-yl]-N,N-dimethyl- (9CI)
MF C21 H33 N6 O3 Si T

Absolute stereochemistry.

Double bond geometry unknown.

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 6-chloro-9-[4-[[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]methyl]-2-cyclopenten-1-yl]-, cis-(9CI)

MF C19 H30 Cl N5 O Si

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 6H-Purin-6-one, 2-amino-9-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methy
l]-2-cyclopenten-1-yl]-1,9-dihydro-, (1R-cis)- (9CI)

MF C17 H27 N5 O2 Si

$$H_2N$$
 N
 N
 R
 S
 O
 $Bu-t$

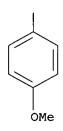
L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 9H-Purin-2-amine, 6-chloro-9-[4-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]me thyl]-2-(methylthio)cyclopentyl]-, (1α,2β,4α)- (9CI)
MF C28 H34 Cl N5 O S Si

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

PAGE 1-A

PAGE 2-A



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 2-Cyclopentene-1-acetic acid 4-(2-amino-6-chloro-9H-pu

IN 2-Cyclopentene-1-acetic acid, 4-(2-amino-6-chloro-9H-purin-9-yl)- α -nitro-, 2-(trimethylsilyl)ethyl ester, [1 α (R*),4 α]- (9CI)

MF C17 H23 C1 N6 O4 Si

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 6-chloro-9-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]me
thyl]-2-cyclopenten-1-yl]-, (1R-cis)- (9CI)

MF C17 H26 Cl N5 O Si

Absolute stereochemistry.

$$\begin{array}{c} \text{C1} \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{R} \\ \text{S} \\ \text{O} \\ \text{Bu-t} \\ \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 6H-Purin-6-one, 2-amino-9-[(1S,3R,4S)-4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(hydroxymethyl-t)-2-methylenecyclopentyl]-1,9-dihydro- (9CI)
MF C18 H28 N5 O3 Si T

$$H_2N$$
 N
 N
 S
 S
 H
 OH
 t
 t
 M
 M
 M
 M
 M
 M
 M

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 9-[4-[[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]methyl]2-cyclopenten-1-yl]-6-(2-methoxyethoxy)-, cis- (9CI)

MF C22 H37 N5 O3 Si

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Propanamide, N-[9-[3-[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]-4-[[(4-methoxyphenyl)methoxy]methyl]cyclopentyl]-6-[2-(4-nitrophenyl)ethoxy]-9H-purin-2-yl]-2,2-dimethyl-, [1R-(1α,3β,4α)]- (9CI)
MF C40 H56 N6 O7 Si

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 6H-Purin-6-one, 2-amino-9-[4-[[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]methyl]-2,3-dihydroxycyclopentyl]-1,9-dihydro-,
 [1R-(1α,2β,3β,4α)]- (9CI)
MF C19 H33 N5 O4 Si

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 6-chloro-9-[4-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]me
thyl]-1-cyclopenten-1-yl]- (9CI)

MF C27 H30 Cl N5 O Si

$$R_{2N}$$
 N
 N
 $CH_{2}-O-Si-Bu-t$
 Ph
 Ph

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN 6H-Purin-6-one, 2-amino-9-[(1S,3R,4S)-4-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-3-(hydroxymethyl)-2-methylenecyclopentyl]-1,9-dihydro- (9CI)
MF C18 H29 N5 O3 Si

Absolute stereochemistry.

$$H_2N$$
 N
 N
 S
 R
 OH
 Si
 Me
 t
 Me

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN IN Cyclopentanol, $3-(2-amino-6-methoxy-9H-purin-9-y1)-5-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2-fluoro-, (1<math>\alpha$, 2 β , 3 β , 5 β) - (9CI) . MF C18 H30 F N5 O3 Si

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 9-[4-[[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]methyl]2-cyclopenten-1-yl]-6-[2-(trimethylsilyl)ethoxy]-, cis- (9CI)

MF C24 H43 N5 O2 Si2

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 6-chloro-9-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]me
thyl]-2-cyclopenten-1-yl]-, cis- (9CI)

MF C17 H26 Cl N5 O Si

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Acetamide, N-[9-[4-[[[dimethyl(1,1,2-trimethylpropyl)silyl]oxy]methyl]-2cyclopenten-1-yl]-6,9-dihydro-6-oxo-1H-purin-2-yl]-, (1R-cis)- (9CI)

MF C21 H33 N5 O3 Si

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 6-chloro-9-[4-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]me
thyl]-2-cyclopenten-1-yl]-, cis- (9CI)

MF C27 H30 Cl N5 O Si

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

Berch PCT/US03/39554 Page 21

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Methanimidamide, N'-[9-[(1S,3R,4S)-4-[[(1,1-dimethylethyl)dimethylsilyl]ox
 y]-3-(hydroxymethyl)-2-methylenecyclopentyl]-6,9-dihydro-6-oxo-1H-purin-2 yl]-N,N-dimethyl- (9CI)

MF C21 H34 N6 O3 Si

Absolute stereochemistry.

Double bond geometry unknown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN Cyclopentaneacetic acid, 2-[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl]- $4-[2-[(2-methyl-1-oxopropyl)amino]-6-[2-(4-nitrophenyl)ethoxy]-9H-purin-9-yl]-, methyl ester, <math>(1\alpha, 2\beta, 4\alpha)$ - (9CI)

MF C42 H50 N6 O7 Si

Berch PCT/US03/39554 Page 22

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 9-[3,4-bis[[[(1,1-dimethylethyl)diphenylsilyl]oxy]methyl

]-2-cyclopenten-1-yl]-6-chloro-, (1R-cis)- (9CI)

MF C44 H50 Cl N5 O2 Si2

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L13 37 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN

IN 9H-Purin-2-amine, 9-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-2fluoro-3-(triphenylmethoxy)cyclopentyl]-6-methoxy-N-(triphenylmethyl)-,

 $(1\alpha, 2\alpha, 3\beta, 4\alpha)$ - (9CI)

MF C56 H58 F N5 O3 Si

Relative stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> b home FILE 'HOME' ENTERED AT 13:10:58 ON 26 MAY 2004

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